


Subject	BIOLOGY	Grade	9	 COLEGIO COLOMBO BRITÁNICO
Student		Date		

ASSESSMENT TASK – PHYTOREMEDIATION

We often think of human technology as the pinnacle of innovation. Biological processes, however, have been evolving for billions of years. Recently, scientists have tried to harness the power of nature in order to solve human problems.

We will be studying **phytoremediation** (using plants to clean pollution). This is a research project that answers the following questions

- Why is phytoremediation needed?
- How does phytoremediation work?
- How are *osmosis*, *diffusion*, *transpiration*, and *plant anatomy* involved in phytoremediation?

The format of the product is your choice, but whatever you choose (PowerPoint, Prezi, magazine article, video, etc.), it should:

- Be informative to someone who has never taken a biology class in their life
- Be organized and easy to read
- Include in-text and end-of-text citations in APA-format

The poster will be created and graded **groups**.

You will be graded on **Criterion D**.

CRITERIA AND ASSESSMENT RUBRICS**Criterion D: Reflecting on the impacts of science**

Level	Level descriptor	Application to this project	Student	Teacher
0	The student does not reach a standard indicated by any of the descriptors below	The product is incomplete or unsatisfactory.		
1-2	The student is able to: <ul style="list-style-type: none"> i. state the ways in which science is used to address a specific problem or issue ii. state the implications of the use of science to solve a specific problem or issue, interacting with a factor iii. apply scientific language to communicate understanding but does so with limited success iv. document sources, with limited success 	<ul style="list-style-type: none"> i. The steps of how phytoremediation works ii. Guess of why phytoremediation is needed iii. The vocabulary used is not scientific iv. At least three citations are provided incorrectly 		
3-4	The student is able to: <ul style="list-style-type: none"> i. outline the ways in which science is used to address a specific problem or issue ii. outline the implications of the use of science to solve a specific problem or issue, interacting with a factor iii. sometimes apply scientific language to communicate understanding iv. sometimes document sources correctly 	<ul style="list-style-type: none"> i. The steps of how phytoremediation works, including osmosis, diffusion, transpiration, and plant anatomy ii. Outline of why phytoremediation is needed, conceptually iii. A limited range of vocabulary from class is applied in the project iv. At least three end-of-text citations are correctly provided in APA format 		
5-6	The student is able to: <ul style="list-style-type: none"> i. summarize the ways in which science is used to address a specific problem or issue ii. outline the implications of the use of science to solve a specific problem or issue, interacting with a factor iii. sometimes apply scientific language to communicate understanding iv. sometimes document sources correctly 	<ul style="list-style-type: none"> i. Summary of how phytoremediation works, including osmosis, diffusion, transpiration, and plant anatomy ii. Outline of why phytoremediation is needed, conceptually and using an example iii. Some of the vocabulary taught in class is applied in this project iv. At least three in-text and end-of-text citations are provided in APA format 		
7-8	The student is able to: <ul style="list-style-type: none"> i. describe the ways in which science is applied and used to address a specific problem or issue 	<ul style="list-style-type: none"> i. Detailed description of how phytoremediation works, including 		

	<ul style="list-style-type: none">ii. discuss and analyse the implications of using science and its application to solve a specific problem or issue, interacting with a factoriii. consistently apply scientific language to communicate understanding clearly and preciselyiv. document sources completely.	<p>osmosis, diffusion, transpiration, and plant anatomy</p> <ul style="list-style-type: none">ii. Detailed description of why phytoremediation is needediii. The vocabulary taught in class is applied in this projectiv. At least three in-text and end-of-text citations are <i>correctly</i> provided in APA format		
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Student Reflection**Teacher Feedback**